Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

50X1

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

COUNTRY USSR/Germany (Soviet Zone)

DATE DISTR. 18 Jun 1952

SUBJECT Soviet Artillery

NO. OF PAGES 9

50X1 PLACE ACQUIRED

NO. OF ENCLS. (LISTED BELOW) 1 (A)

50X1 DATE ACQUIRED

SUPPLEMENT TO REPORT NO.

DATE OF INFORMATION

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

Command Channels and Artillery Doctrine

50X1

1. The basic manuals on Soviet artillery are the following:

   (a) Artillery Field Manual of the Red Army, Firing Regulations for Ground Artillery, 1945 (Nastavleniye Artilleriy Krasnoy Armiy, Pravila Strelby Nazemnoy Artilleriy), is the basic Soviet artillery manual.

   (b) AAA Tactics (Taktika Zenitnoy Artilleriy), written by Col (fnu) Nikitin, instructor of tactics in the Dzherzhinskiy Artillery Academy in Moscow, published 1949 or 1950, prescribes tactics and techniques for Soviet AAA.

   (c) The Field Manual (Polevoy Ustav), published in 1948 by the Ministry of Armed Forces in Moscow, deals with all branches of service and techniques of artillery support of infantry. Part 1 of this manual concerns battalion and regiment, and Part 2 concerns division and corps. This manual supersedes the Infantry Combat Manual (Boyevoy Ustav Pekhoty), which became obsolete in 1948.

CLASSIFICATION SECRET/SECURITY INFORMATION

STATE	X	NAVY	X	AEC	X	DISTRIBUTION	
ARMY	X	AIR	X	FBI	X		

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9
50X1

(d) All three manuals are classified Top Secret and are kept in the Secret Documents Section.

2. Soviet artillery units are placed under the command of tactical troops which they support until they fulfill their assignment. The level of the attachment for support depends upon the extent of the artillery mission, the type of combat which is planned and the decision of the division, corps or army commander. Whenever the deputy commander for artillery feels that the artillery organic to a rifle unit is insufficient for the planned mission, an artillery battery may be attached to a rifle battalion or regiment for support, an artillery battalion may be attached to a rifle regiment or division for support, or an artillery regiment may be attached to a rifle regiment, division or corps for support.

3. An artillery division in combat is subordinated directly to artillery corps, and the corps to an army or an army group. A separate artillery regiment is subordinated directly to a rifle division or corps in combat. An artillery corps is attached to an army or army group for combat.

4. Artillery reconnaissance men and forward observers are too valuable to be sent out to infiltrate the enemy front prior to an attack even to ensure more accurate fire direction. Instead, infantry patrols are infiltrated and remain inside enemy lines with a radio in order to direct fire. In a Soviet artillery unit the forward observer, /in US artillery concept/ is actually the unit commander - whether at battery, battalion, regimental or division level. The observation post is on the front line, even at division level, and includes the respective commander with radio, telephone, and reconnaissance men, and messengers. In an emergency the observer, the unit commander, can send his reconnaissance men to infiltrate enemy lines and report to him by radio, but usually only infantry patrols perform this duty.

5. Firing positions are selected according to terrain, suitability for camouflage, visibility (guns must have a 360 degree traverse), and easy approach facilities for ammunition supply from the rear. Artillery positions are never in front of mountains or woods. When there is sufficient time, the regimental or divisional artillery deputy checks the selection of firing positions; otherwise battalion commanders set up firing positions as necessary. Upon occupation, two large foxholes are dug by the gun crews for their protection. The guns are in revetments, and are camouflaged with nets, twigs, and earth.

6. Usually Soviet artillery is moved by rail over long distances (100 km or more), and by organic transport (prime movers) for distances under 100 km. The movement itself is usually cross-country, can negotiate steep hills up to 45 degrees grade, and is not road-bound. Point guards, (not special traffic control personnel) drawn from gun crews, designate fords, ditches and passages for the units on the move. Vehicles travel 30 meters apart, at 40 km per hour in daytime, 25 km at night. Tanks and prime movers may carry logs which are used to make temporary bridges. Usually engineer troops clear the road for vehicular traffic when necessary.

SECRET

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

7. Displacements in support of attack, withdrawal or defense are ordered as necessary at the discretion of the artillery commander according to tactical conditions and the need for flexibility. There is no standard procedure, but usually 57-mm AT guns move with the infantry, 85-mm AA guns are two to three km behind the infantry, light howitzer artillery is three to six km behind the front lines, and heavy artillery is about eight to twelve km behind the lines. The heavy artillery does not frequently displace because it can fire up to a range of 15 km; consequently, a displacement of one or two km is of no importance and fire can still be transferred by direction of the artillery commander.

8. For aiming the guns the following steps are taken:

(a) The Soviet practice of registration is called "Vilka" (fork) and zeros the target with three or four rounds. After each round the observer corrects fire by directing a shift to left, right, over or short as necessary. The observer attains this vertical and horizontal control by calling for a shift of fire according to the error indicated by the graduations of the reticle on the battery commander's scope: the observer has a battery commander's scope, binoculars, a telephone and a radio for his use. After the target has been zeroed-in (before commencement of combat) it is designated by reference points and entered on the plotting chart.

(b) Aiming stakes, placed in front of guns, are used to bring guns within a unit on the target. Also a fan (sheaf) method, called "veyer," is used to calibrate the azimuth control: when the first gun has registered on the target, the battery officers calculate the settings for other guns by using the azimuth adjustment, compass reading, and reference points indicated by the registered gun.

(c) The artillery survey is as extensive as time permits, and is conducted under the direction of the division commander. Means used include infantry scouts or patrols, aerial reconnaissance, interrogation of prisoners or indigenous people, and sound locating devices. [redacted] 50X1

[redacted] 50X1

(d) Soviet artillery consults weather information a great deal in firing. There are special firing tables for rainy or other inclement weather, and the propellant zones are changed according to meteorological conditions. [redacted] 50X1

[redacted] 50X1

(e) [redacted] there is no provision in Soviet artillery for calibration of guns within a unit. [redacted] 50X1

[redacted] 50X1

velocity between several guns of a battery. The only method [redacted] for bringing the fire of one gun on the same target as the other guns of a battery, was described above, /See paragraph 8b/.

SECRET

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

50X1

9. Hostile batteries are located by sound detectors, scouts, fire observation, and interrogation of prisoners. Data are forwarded to division headquarters by telephone, radio, or messenger for further action. The division CO takes measures to neutralize the enemy batteries, by having the deputy for artillery determine which guns (depending upon whether these are direct fire targets or deflade fire targets) should fire upon the hostile batteries, and by assigning the task of destroying the hostile batteries to the pertinent unit (artillery regiment, howitzer regiment, mortar unit, etc).

10. On the use of fire power I can say the following:

(a) All Soviet artillery employs direct fire to the greatest possible extent, and fires only rarely on hidden targets; for example when firing from long range.

(b) Soviet artillery fires mainly on visible targets, and does not employ much harassing fire. Interdictory fire is used very seldom. Field guns very rarely use deflade firing positions, but mortars and rocket launchers employ this method frequently.

(c) Soviet tanks, as a rule, are not used as supplementary artillery, because the number of rounds carried in a tank is limited and must be conserved. However, tactical considerations may prompt a commander to make use of tanks as additional artillery, and in such cases they are used like regular artillery, for the same missions, mostly on visible targets, but occasionally on indirect targets.

11. During World War II all batteries had a camouflaged dummy battery emplacement to deceive enemy air observers, and sometimes explosive charges were fired near the fake batteries. At present no dummy batteries are used in training.

12. On the use of artillery in attack I can say the following:

(a) Reinforcing artillery moves into an area position one night before the attack at the latest. If there is sufficient time, guns may move into the area a week prior to the contemplated attack. During World War II there were cases in which a defensive position suddenly changed to an offensive position, and consequently guns were in position for one month prior to the attack. Mortars move into position with other units. Rocket launchers move into position the night before the attack or immediately before the attack.

(b) Usually Soviet artillery fires during the 60 minutes preceeding an attack and sometimes for two hours before the attack.

(c) All artillery, except tanks and AAA, fires prior to the jump-off. This includes mortars, AT guns, field guns, SUs, (self-propelled guns) and rocket launchers. AAA fires only at attacking aircraft.

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

50X1

Fire Control Procedures

13. The techniques for the adjustment and control of fire are prescribed in the Artillery Field Manual of 1945 /See paragraph 1 above/ 50X1

(a) The regimental or division artillery deputy decides which target will be fired upon, and how many guns, rounds, and which types of rounds will be used against the target.

(b) Fire direction centers are maintained at battery, battalion, regiment, and division levels.

(c) Firing charts are used for indirect firing, to make adjustments for weather changes and for zeroing guns. No firing charts are used for AAA guns when firing on aircraft or tanks, since these are visible targets.

(d) The topography platoons assist in plotting the targets and in map reconnaissance work. The intelligence platoon is used to reconnoiter new targets, to infiltrate behind enemy lines and to direct fire by radio contact with the Battery or Battalion CO.

(e) If the artillery commander of a battalion or regiment considers it necessary to bring all the guns of a battalion on a target, he issues the pertinent order by radio or telephone. Soviet practice is to fire volleys from all guns in order to destroy a target; timed fire is not used.

(f) Within one minute after a target is reported the entire battalion must be ready to fire on it. This procedure is being practiced constantly, and high efficiency and speed has been developed. This procedure applies to visible targets - indirect targets are assigned to specific mortar or howitzer batteries.

(g) Soviet artillery will bring the fire of more than one battalion to bear on the same target of opportunity if necessary. Simultaneous delivery of fire will require one to two minutes time for coordination.

System of Forward Observers

14. The Guide for Training of Reconnaissance Men, Telephone Men and Radiomen (Rukovodstvo Po Obucheniy Razvedchikov, Telefonistov i Radiystov) is the manual which prescribes the training, functioning, and examination of artillery reconnaissance men. The duties of forward observers are prescribed in the Artillery Field Manual of 1945 /See paragrph 1 above/.

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

15. In Soviet artillery units the forward observer is the unit CO; ie, the battery commander observes and directs the fire of his battery, and battalion and regimental commanders observe and direct the fire of their units. The CO is located in the observation post with radio, telephone, and reconnaissance men and messengers. The observation post is as close to the front lines as is possible, and an alternate post is used when necessary. The command post of Soviet artillery units is from two to five km behind the front lines and has a staff which deals with logistical problems rather than fire direction or fire control.

16. There are no special forward observers; instead, the forward observers are trained artillery officers who are unit COs. They get their training in conducting maneuvers and exercises with infantry troops. According to my information, infantry is considered the major service, and all other services have only the mission of supporting it.

17. A forward observer (either battery or battalion CO) is responsible only for his own sector. If a target appears outside the sector assigned to a forward observer, it is the responsibility of the other forward observer to take action upon it. No rule, however, prohibits one observer from telephoning or radioing the information to the other observer. A forward observer definitely will not direct fire upon a target outside his assigned sector unless he is specifically ordered to do so by his superior.

18. The selection of positions for forward observers and observation posts is determined by terrain features, such as cover, visibility, proximity to targets, and ease of camouflage.

19. Usually the forward observer of a battery controls four guns firing on one target; a battalion forward observer controls 12 guns and a regimental forward observer controls 36 guns. The division commander does not control the fire of his unit, but observes and directs the fire of the entire division. There is no set practice for all cases and procedure may vary.

20. On the reporting of the forward observers

(a) Targets are located and designated by reference points and grid coordinates. 50X1

(b) The battery forward observer reports his observations to the battalion commander and then directs fire upon the target.

(c) A forward observer, in reporting to his superior has only one type of report to make, approximately as follows: "Target destroyed, used 12 rounds." If the target is not destroyed, he reports this to the divisional or regimental artillery deputy, who then orders additional fire to destroy the target.

21. There is a forward observer in each battery, four per battalion, and nine per regiment. They vary in ranks from lt col in the regiment to maj in the battalion and capt in the batteries. Administratively the forward observers are the unit commanders within the regiment.

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

50X1

22. The forward observer functions with a group which includes one or two telephone men, one or two radiomen, one or two reconnaissance men, and one or two messengers, all of whom are NCOs or privates. Whenever an entire battalion fires on a single target the battalion CO is the only forward observer. If each battery fires on a seperate target, each battery has a forward observer in the form of the battery commander. /See Enclosure (A)/

50X1

Communications

23. means of communications

50X1

(a) The commander of a supported unit requests fire on a target by telephoning or radioing to his regimental or division commander, who then will order his deputy for artillery to destroy the target. Grid coordinates or reference points are used to designate the target area, and usually no more than five minutes are required before the fire requested is forthcoming.

(b) Regiments and higher units have organic artillery but may be given additional artillery for support. Communications between supported troops and the attached artillery must go through the combined commander who is the commanding officer of the supported unit. For example, if an artillery battalion supports an infantry battalion, the infantry battalion commander, as the combined commander, maintains communications with the supporting artillery by radio, phone, or messengers.

(c) The Soviets have no artillery liaison officers. Each infantry unit of regimental or higher level has an artillery deputy who has his own staff.

(d) The forward observer communicates by telephone, or radio, or through messengers with his unit and the supported unit. He can communicate with all other echelons, either higher, lower, or lateral, by the same means.

(e) Artillery regiments have their own artillery telephone men, who lay telephone lines, and artillery radiomen for radio communications. Reconnaissance men or any gun crew members of an artillery battery may be used as messengers between the artillery unit and the supported unit.

50X1

Organization and Equipment

50X1

24.

50X1

Observation balloons may also be used for fire observation. Aerial observers for artillery are always artillery officers assigned to the respective artillery unit.

50X1

25. information on reconnaissance teams:

50X1

(a) Artillery regiments have special headquarter units of reconnaissance and topographical men

50X1

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

(b) A rifle division has two reconnaissance officers, one lt col, one maj, in its headquarters and one reconnaissance officer on its artillery staff.

(c) The separate AAA battalion of a rifle division has a Chief of Reconnaissance (capt or lt, who is also the battalion staff signal officer); and two reconnaissance men (pvts, one a senior reconnaissance man), one telephone NCO and three telephone men (pvts, one radio NCO and three radiomen (pvts) all of whom are in the headquarters platoon. The battalion reconnaissance section has a T/E of 21 TAI-43 field telephones, six RBM radio receiver-transmitters, and three motorcycles.

(d) Each battery of the separate AAA battalion of a rifle division has two reconnaissance privates (one senior reconnaissance man - starshii razvedchik) whose duty it is to spot and identify enemy aircraft, two telephone men, and two radiomen, all of whom are in the headquarters squad. [See Enclosure (A)] 50X1 50X1

26. [redacted] 37-mm AA guns [redacted] 50X1

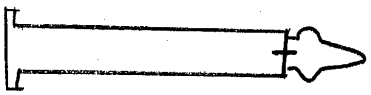
(a) The 1939 model of the 37-mm AA gun in travelling position weighs 3200 kg with its shield and 3000 kg without it. In firing position the 37-mm AA gun weighs 3100 kg with the shield and 2900 kg without it. [Note: the late 1939 model 37-mm AA gun has a shield]. My unit, the 932d Sep AAA Bn, had an unknown number of 37-mm AA guns with shields and an unknown number of 37-mm AA guns without shields.

(b) The vertical range of the 37-mm AA gun is four km, horizontal range is six km, and the most effective range is two and one-half km.

(c) The 37-mm shell is fixed (Unitarny Snaryad) and has no changes of propellant. The shell arrives from the factory with the MG-8 fuze already affixed. The complete round weighs 735 grams. I do not know the weight of the explosive in the round.

27. Armor piercing rounds for use against tanks and tracer fragmentation rounds for use against aircraft are available for 37-mm and 85-mm AA guns. Armor piercing and HE rounds are available for 76-mm and 122-mm field guns. [redacted] 50X1 50X1

28. In 1944 the Soviets developed a special shell called "Pod Kalibernyy Snaryad" (sub-caliber projectile) for the 57 and 76-mm AT, 76 and 122-mm field guns, and the 85-mm AA and AT guns, which proved to be very effective in armor piercing. It was a fixed shell of the same size as the standard projectile, but it had a different nose. [redacted] 50X1



Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

50X1

50X1

It pierced the armor of German Tiger tanks at ranges of 300 - 600 m. this projectile will penetrate 20 cm of armor at ranges of 1000 - 1200 m.

50X1

-end-

50X1

Enclosure (A): Firing Positions of a Sep AAA Bn of a Rifle Division

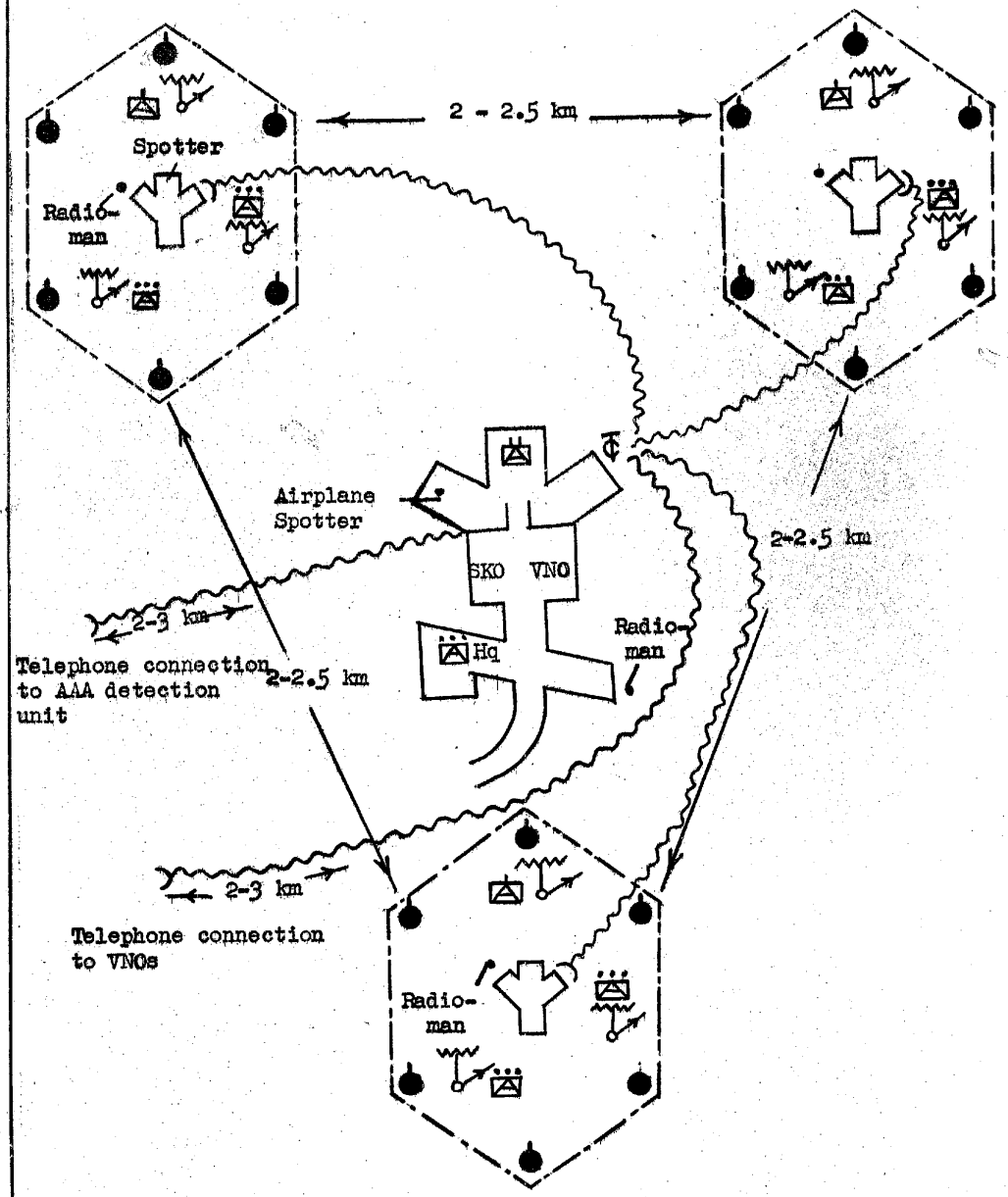
50X1

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

SECRET/SECURITY INFORMATION

Firing Positions of a Sep AAA Bn of a Rifle Division



50X1

SECRET/SECURITY INFORMATION

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9

Legend

Firing Positions of a Sep AAA Bn of a Rifle Division

The sketch shows a typical firing position for a Sep AAA Bn.

Batteries are located at a distance of two to two and one-half km apart. The battalion command post is placed somewhere near the center of the entire area. Interval between individual AA guns in each battery is about 50 to 100 m.

Batteries may be placed in a triangular formation, as shown, or they may be placed in a straight line, whereupon the CP will be located beside one of the batteries.

The battalion commander and his staff are located at the CP. He has a telephone switchboard which he can use to communicate with all the batteries and a radio station which is in contact with the aircraft warning system and aircraft detector stations. Also the radio can be used for communication with the batteries or higher headquarters.

The battalion CP contains about 18 persons: the battalion CO, C of S, Hq Plat commander, two VNOs (aircraft warning system) men, two SKO (Stantsiya Krugovo Abzora - AAA detection device) men, 10 or 11 aircraft spotters, and radiomen, telephone men, observers, and aircraft identification personnel.

Battery commanders, each having a telephone liaison man, an aircraft identification scout, and a radioman, are located at the battery CPs. Platoon leaders, equipped with range finders, are located near their platoons. Each battery commander has a computing team which compiles firing data.

50X1

Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr2013/04/29 : CIA-RDP82-00047R000100450001-9